

## **DEPARTMENT OF THE ARMY**

NEW ORLEANS DISTRICT, CORPS OF ENGINEERS P.O. BOX 60267 NEW ORLEANS, LOUISIANA 70160-0267

May 4, 2009

# CLEAN WATER ACT, SECTION 404 PUBLIC NOTICE

Permanent Protection for the Outfall Canals Project on 17<sup>th</sup> Street, Orleans Avenue, and London Avenue Canals, Jefferson and Orleans Parishes, Louisiana

Interested parties are hereby notified that the U.S. Army Corps of Engineers, Mississippi Valley Division, New Orleans District (CEMVN), is planning to construct new permanent pump stations and closures at or near the mouths of the outfall canals operating in series with the existing Sewerage and Water Board of New Orleans (SWBNO) pump stations to prevent storm surges from entering the outfall canals.

PROJECT AUTHORITY: The Lake Pontchartrain and Vicinity (LPV) project was authorized under the Flood Control Act of 1965 (Public Law [PL] 89-298, Title II, Sec. 204) which amended an authorized "project for hurricane protection on Lake Pontchartrain, Louisiana ... substantially in accordance with the recommendations of the Chief of Engineers in House Document 231, Eighty-ninth Congress." The original statutory authorization for the LPV project was amended by the Water Resources Development Acts (WRDA) of 1974 (PL 93-251, Title I, Sec. 92); 1986 (PL 99-662, Title VIII, Sec. 805); 1990 (PL 101-640, Sec. 116); 1992 (PL 102-580, Sec. 102); 1996 (PL 104-303, Sec. 325); 1999 (PL 106-53, Sec. 324); and 2000 (PL 106-541, Sec. 432); Energy and Water Development Appropriations Acts of 1992 (PL 102-104, Title I, Construction, General); 1993 (PL 102-377, Title I Construction, General); and 1994 (PL 103-126, Title I Construction, General).

The Department of Defense, Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico, and Pandemic Influenza Act of 2006 (3rd Supplemental - P.L. 109-148, Chapter 3, Construction, and Flood Control and Coastal Emergencies) authorized accelerated completion of the project and restoration of project features to design elevations at 100 percent Federal cost. The Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery of 2006 (4th Supplemental – P.L. 109-234, Title II, Chapter 3, Construction, and Flood Control and Coastal Emergencies) authorizes construction of authorized a 100-year level of risk reduction; the replacement or reinforcement of floodwalls; and the construction of levee armoring at critical locations. Additional Supplemental Appropriations include the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act, 2007 H.R. 2206 (pg. 41-44) Title IV, Chapter 3, Flood Control and Coastal Emergencies, (5<sup>th</sup> Supplemental), General Provisions, Sec. 4302.

<u>PROJECT PURPOSE:</u> The purpose of the proposed action is to reduce the risk to the City of New Orleans and Jefferson Parish from storm surge-induced flooding through the 17<sup>th</sup> Street, Orleans Avenue, and London Avenue Outfall Canals, while not impeding the ability of the area's internal drainage system to function.

<u>DESCRIPTION OF ACTION</u>: The proposed action consists of construction of new permanent pump stations and closures at or near the mouths of the outfall canals operating in series with the existing SWBNO pump stations. The existing SWBNO pump stations #3, #4, #6, and #7 would remain in service and operate concurrently or in series with the new pump stations and the outfall canals would continue to convey stormwater from the existing pump stations to the new pump stations. This alternative leaves in place the floodwalls that flank the outfall canals, and these floodwalls would remain an integral part of the city's internal flood protection system.

## 17th Street Canal

The new permanent pump station at the 17<sup>th</sup> Street Canal as proposed could be approximately 450 feet long by 200 feet wide and include inlet and outlet works, trash screens, and a pump station building housing pumps, motors, and the gate structure. The new gate structure could consist of gates, gate guides, hoisting equipment, and an enclosure to protect the hoisting equipment. The pump station could be approximately 500 feet to 1,000 feet north of the Hammond Highway Bridge to avoid the need for any modifications to that flood-proofed bridge, but the exact location and design will not be known until the design-build plan is selected by the USACE. The new pump station and closure structure would tie-in with the existing storm water drainage system and with other Hurricane and Storm Damage Risk Reduction System (HSDRRS) projects.

The new pump station could impinge on both banks of the canal, which would require permanent right-of-way (ROW) acquisition of approximately 37 acres of water and land, potentially directly affecting four residential structures and commercial property on the east bank and commercial property on the west bank. In addition, a temporary construction easement of approximately 4 acres could be required on the east and west banks of the canal, including the area near the Hurricane Katrina breach repair. Demolition and removal of the existing interim closure structure (ICS) would be required once construction of the new pump station and closure structure is completed. The entire area identified as "Maximum Extent of Permanent Impacts" on figure 1 could be impacted as a result of this proposed action. During design and construction of the new pump station, reasonable measures would be implemented to minimize the impacts to residential and commercial interests, such that the final site design could actually be smaller and have fewer impacts on these areas when completed.

A generator building and fuel storage tank farm complex could be constructed in support of the new pump station. This complex could include parking, general staging and storage space, and local storm drainage features. Utilities would include potable water service, sanitary sewer and natural gas, all connected to the new pump station from existing utilities available in the area. Finish grade for the pump station complex would be constructed above the 100-year flood level elevation.

Channel transitions could be required north and south of the new pump station on both sides of the canal banks. The channel transition north of the pump station could be constructed as reinforced concrete retaining walls. South of the pump station, only the east bank of the canal could require a retaining wall transition. Earthwork activities under the proposed action could be exclusively excavation, which could result in soil removal from the site.

Because the proposed location of the new pump station is near the lake, erosion protection would be required, which could consist of a strip of riprap protection in the bottom of the canal north and south of the new pump station. A breakwater in Lake Pontchartrain, approximately 104 feet wide by 600 feet long, could be constructed to an elevation of +15.5 ft North American Vertical Datum (NAVD) 88 to protect the new pump station. In this area the lake bottom elevation is -8.5 ft and the typical water elevation is 1.0 ft. The 17<sup>th</sup> Street Canal breakwater could require approximately 30,000 cubic yards of stone. To construct the breakwater, all access would be from the land and no dredging of Lake Pontchartrain would be required.

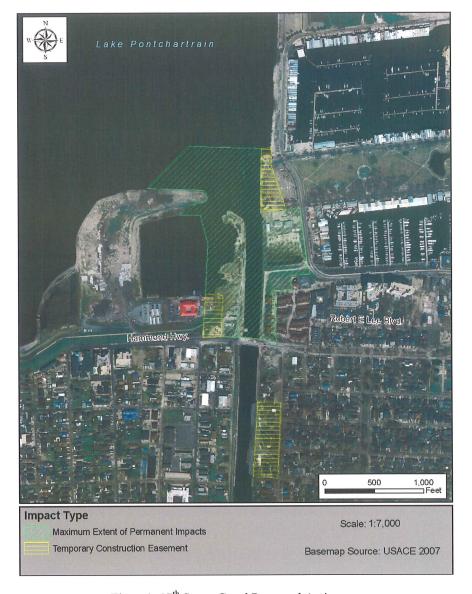


Figure 1. 17<sup>th</sup> Street Canal Proposed Action

#### **Orleans Avenue Canal**

The new permanent pump station at the Orleans Avenue Canal as proposed could be approximately 150 feet long by 150 feet wide and include inlet and outlet works, trash screens, and a pump station building housing pumps, motors, and the gate structure. The new gate structure could consist of gates, gate guides, hoisting equipment, and an enclosure to protect the hoisting equipment. The new pump station could be in the existing canal, as close to the Lakeshore Drive Bridge as possible without creating the need for modifications to that bridge. Thus, the new pump station could be approximately 300 feet south of Lakeshore Drive. This location provides for convenient connection of existing lakefront levees to the new pump station features. The new pump station and closure structure would tie-in with the existing storm water drainage system and with other HSDRRS projects.

A generator building and fuel storage tank farm complex could be constructed in support of the new pump station. This complex could also include parking, general staging and storage space, and local storm drainage features. Utilities would include potable water service, sanitary sewer and natural gas, all connected to the new pump station from existing utilities available in the area. Finish grade for the pump station complex would be constructed above the 100-year flood level elevation.

Permanent ROW acquisition of approximately 21 acres of water and land could occur almost exclusively on the west bank of this proposed layout and could include areas that are primarily publicly-owned green space, rather than privately owned homes. Two non-residential structures could potentially be affected by the proposed layout. A temporary construction easement of approximately 6 acres would be expected. The ICS south of this site would be removed after the pump station construction is complete. The entire area identified as "Maximum Extent of Permanent Impacts" on figure 2 could be impacted as a result of this proposed action. During design and construction of the new pump station, reasonable measures would be implemented to minimize the impacts to this area, such that the final site design could actually be smaller and have fewer impacts on the area when completed.

Because of the lakeshore location of this pump station, a substantial volume of erosion protection would be required; also, a strip of riprap protection would be placed along the bottom of the canal, both immediately north and south of the new pump station. A breakwater in Lake Pontchartrain, approximately 116 feet wide by 700 feet long could be constructed to an elevation of +15.5 NAVD 88. In this area the lake bottom elevation is -11.5 feet and the typical water elevation is 1.0 feet. The Orleans Avenue Canal breakwater could require approximately 43,400 cubic yards of stone. To construct the breakwater, all access would be from the land and no dredging of Lake Pontchartrain would be required.

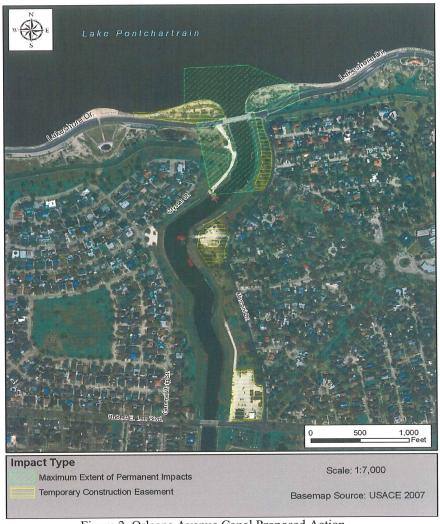


Figure 2. Orleans Avenue Canal Proposed Action

### **London Avenue Canal**

The new permanent pump station at the London Avenue Canal as proposed could be approximately 350 feet long by 160 feet wide and include inlet and outlet works, trash screens, and a pump station building housing pumps, motors, and the gate structure. The new gate structure could consist of gates, gate guides, hoisting equipment, and an enclosure to protect the hoisting equipment. The pump station could likely be primarily situated on the east canal bank. This alternative would provide for convenient connection of existing levees to the new pump station structure. The outfall canal levees north of the new pump station would be raised to the 100-year level of risk reduction height and connect to and be continuous with the existing Lake Pontchartrain levee system. The new pump station and closure structure would tie-in with the existing storm water drainage system and with other HSDRRS projects.

Permanent ROW acquisition of approximately 21 acres of water and land could occur on the east and west banks of the canal, and could include areas that are primarily publicly-owned green space, rather than privately-owned homes. ROW acquisition of some University of New Orleans property could potentially be required. A temporary construction easement of approximately 6 acres could be necessary near the west side of the ICS. The ICS would be removed after the new pump station construction is complete. The entire area identified as "Maximum Extent of Permanent Impacts" on figure 3 could be impacted as a result of this proposed action. During design and construction of the new pump station, reasonable measures would be implemented to minimize the impacts to this area, such that the final site design could actually be smaller and have fewer impacts on the area when completed.

Constructed in support of the new pump station could be a generator building and fuel storage tank farm complex. This complex could also include parking, general staging and storage space, and local storm drainage features. Utilities would include potable water service, sanitary sewer and natural gas, all connected to the new pump station from existing utilities available in the area. Finish grade for the pump station complex would be constructed above the 100-year flood level elevation.

A relatively small volume of erosion protection would be required in and around the pump station. Specifically, a strip of riprap protection could be placed along the bottom of the canal, both immediately north and south of the pump station. Given the inland location of this pump station, a breakwater in Lake Pontchartrain would not be necessary to protect the pump discharge from wave effects during pumping operations.

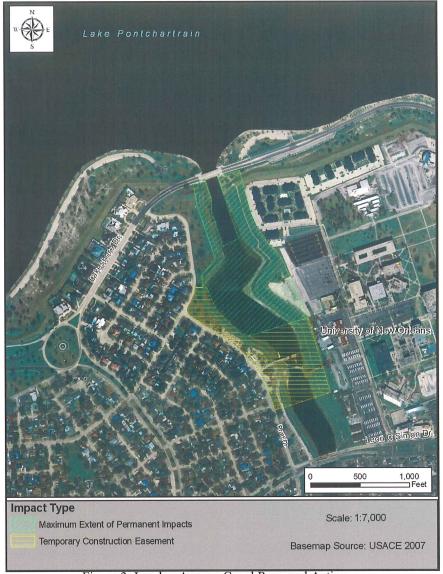


Figure 3. London Avenue Canal Proposed Action

## NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE:

The impacts of the proposed action and alternatives to the proposed action will be analyzed and disclosed in Individual Environmental Report (IER) #5.

STATE WATER QUALITY CERTIFICATION: A Water Quality Certification application was sent to the Louisiana Department of Environmental Quality (LDEQ) on October 8, 2008, and the certification was received from LDEQ on January 26, 2009. Public notice regarding this certification was placed in the Baton Rouge Advocate and Times-Picayune on December 17, 2008.

SECTION 404(B)(1) GUIDELINES: The placement of earthen fill material into the waters of the U.S. would be made through the application of guidelines promulgated by the Administrator, Environmental Protection Agency, in conjunction with the Secretary of the Army. If these guidelines alone prohibit the placement of earthen fill material, any potential impairment on the restoration and completion of the Lake Pontchartrain and Vicinity Hurricane Protection System which would result from failure to place this material will also be considered.

<u>COASTAL ZONE CONSISTENCY DETERMINATION:</u> A Coastal Zone Consistency Determination was prepared in September 2008 and coordinated with Louisiana Department of Natural Resources

(LDNR). Based on this coordination it was determined that the Project was consistent to the maximum extent practicable on November 17, 2008.

ENDANGERED SPECIES: In a letter dated December 29, 2008, the U.S. Army Corps of Engineers, New Orleans District, Hurricane Protection Office submitted to U.S. Fish and Wildlife Service its determination that the proposed project would not adversely impact any threatened or endangered species or critical habitat thereof which falls under their jurisdiction. In a letter dated January 30, 2009 and received February 2, 2009, the U.S. Fish and Wildlife Service concurred with this assessment.

In a letter dated September 23, 2008, the U.S. Army Corps of Engineers, New Orleans District, Hurricane Protection Office submitted to the National Marine Fisheries Service its determination that the proposed project would not adversely impact any threatened or endangered species or critical habitat thereof which falls under their jurisdiction. In a letter dated April 17, 2009 the National Marine Fisheries Service concurred with this determination.

ESSENTIAL FISH HABITAT: Direct impacts to Essential Fish Habitat (EFH) could occur due to changes in estuarine substrate including 1.4 acres at the 17<sup>th</sup> Street Canal and 1.8 acres at the Orleans Avenue Canal. These impacts would be due to the breakwater structure that would be constructed to protect the new pump station and closure structure.

During construction and operation of the proposed pump stations and closure structures, direct impacts to EFH and EFH species may occur from a localized reduction in available nursery habitat for juveniles and access to marsh edge habitat. Mortality of some individual organisms designated as EFH species may occur during construction activities due to burial during dredging and disposal. While individual organisms are expected to move from unfavorable conditions, this change is not expected to affect populations of managed species for which EFH has been designated.

Indirect impacts on EFH and EFH species may occur during construction due to changes in water characteristics. Impacts on EFH and EFH species most likely would be temporary; indirect impacts would be caused by the displacement of organisms from localized areas due to elevated turbidity levels, decreased DO, and increased BOD associated with construction dredging activities. Most organisms are expected to relocate from areas with unfavorable conditions until construction activities are complete; however, depressed DO levels in the project area may lead to behavioral changes and decreased growth rates in some EFH and EFH species.

Finally, construction activities such as pile driving may cause behavioral changes and sub-lethal impairments to the hearing of some fishes. Although individuals may be taken during construction activities for the proposed alignment, the number of organisms affected is not expected to impact populations of fishes.

Overall, the proposed action could directly impact EFH in the vicinity of the new pump stations and closure structures. Possible impacts could be: impeding active and passive transport of eggs and larvae across the barrier, blocking access to habitat, and blocking access to prey items. These impacts could result in alterations in behavior, decreases in growth, and localized changes to the community structure.

CULTURAL RESOURCES: In letters to the State Historic Preservation Office (SHPO) and Indian Tribes dated 1 October 2008, the CEMVN provided project documentation, an evaluation of cultural resources potential in the project area, and the results of Phase 1 investigations, and found that the proposed actions would have no impact on cultural resources. The SHPO concurred with our "no historic properties affected" finding in a letter dated 10 November 2008. The Seminole Nation of Oklahoma, the Seminole Tribe of Florida, and the Caddo Nation of Oklahoma concurred with our effect determination

on 6 October 2008, 11 October 2008, and 17 October 2008, respectively. No additional Indian Tribes responded to our requests for comment. Section 106 consultation for the proposed project actions has been concluded. However, if any unrecorded cultural resources are determined to exist within the proposed project action boundaries, then no work will proceed in the area containing these cultural resources until a CEMVN archaeologist has been notified and final coordination with the SHPO and Indian Tribes has been completed.

<u>COORDINATION</u>: The following is a partial list of agencies to which a copy of this notice is being sent for coordination purposes:

Region VI, Environmental Protection Agency Regional Director, NOAA Fisheries Service Regional Director, U.S. Fish and Wildlife Service Louisiana Department of Wildlife and Fisheries Louisiana Department of Environmental Quality Louisiana Department of Natural Resources Louisiana Department of Transportation and Development Louisiana State Historic Preservation Officer

<u>PROJECT PLANS:</u> Plans for the proposed work will be on file in the Hurricane Protection Office, U.S. Army Corps of Engineer District, New Orleans, 7400 Leake Avenue, New Orleans, Louisiana 20118, and when they become available, may be seen by anyone having an interest in them.

<u>PUBLIC INVOLVEMENT</u>: Interested persons may submit comments or suggest modifications regarding the proposed work in writing to Gib Owen, PM-R, P.O. Box 60267, New Orleans, Louisiana 70160-0267. Mr. Owen can also be reached at (504) 862-1337.

Comment period ends 30 days from the date of this notice.

Any person who has an interest which may be affected by these fill placement activities may request a public hearing. The request must be submitted in writing to Mr. Owen within the comment period of this notice and must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity. You are requested to communicate the information contained in this public notice to any parties who may have interest in this proposed project.

Joan Exnicios

Acting Chief, Planning Division